# CORNER PIECE FOR MATTRESSES AND CONSTRUCTION METHOD THEREFOR

## D E S C R I P T I O N

### OBJECT OF THE INVENTION

The present invention relates to a piece that has been specifically conceived to be used as a corner piece at each vertex or corner of a mattress, particularly suitable for being used in spring mattresses, so that it shares the elastically deformable nature of the mattress core and is easily attachable to the corners of the mattress, preventing the typical bulges, recesses or deformations that generally appear in these areas of spring mattresses.

### BACKGROUND OF THE INVENTION

Mattresses of the aforementioned type generally comprise a spring casing in which a number of spring units, generally helical in shape, are suitably connected to each other while being disposed between to imaginary planes parallel to the bases of the mattress. More specifically, these spring units are coplanar on their ends, where they are attached to padded bodies that line the core of the mattress on its top and bottom, softening the physical contact with said springs and thereby increasing the comfort of the mattress for the user.

A similar padded lining is present around the entire perimeter of the mattress, where the result is less effective as the deformability of these areas is greater, particularly so in the corners, where bulges, recesses,

deformations or wrinkles often appear that harm the appearance of the mattress.

**DESCRIPTION OF THE INVENTION**

The corner piece for mattresses disclosed by the invention solves the above-described problem in a fully satisfactory manner, and consists of a tubular body made of polyethylene, equal in length to the thickness of the spring core of the mattress, with deep notches established at its open ends and a longitudinal slit along one of its lines of symmetry, so that this polyethylene part can adapt itself and be attached to the springs of the mattress at its corners, providing at each corner an externally smooth and perfectly cylindrical surface that reduces the elastic deformability of the mattress at the corresponding corner, while also greatly enhancing its appearance.

As regards the method for constructing said polyethylene corner piece, it involves using a tubular cylindrical part obtained by extrusion, which is cut along one of its lines of symmetry allowing it to be extended, to turn it into a laminar flat body in the cutting stage in which the end notches are obtained, finally recovering its original three-dimensional or cylindrical shape by simple elastic recovery of its material.

**DESCRIPTION OF THE DRAWINGS**

As a complement of the description being made, in order to aid a better understanding of the characteristics of the invention, according to an example of a preferred embodiment, the present description is accompanied by a set of drawings as an integral part of it where, for

purposes of illustration only and in a non-limiting sense, the following is shown:

Figure 1 shows a perspective view of a mattress corner piece made in accordance with the object of the present invention.

Figure 2 also shows a perspective view of the corner piece of the previous figure, duly coupled on one of the corners of a spring mattress.

Figures 3, 4 and 5 show, respectively, a profile, elevation and plan view of another preferred embodiment of the invention.

Figure 6 shows, finally, a perspective view of the same corner piece of the previous figure duly coupled on each of the corners of a spring mattress.

**PREFERRED EMBODIMENT OF THE INVENTION**

In view of the above-described figures, it can be seen that the corner piece for mattresses disclosed by the invention is comprised of a tubular body (1), preferably of polyethylene and obtained by extrusion, with a configuration tending towards a cylinder and a considerable wall thickness, the tubular body (1) being open by a longitudinal slit (2) placed in correspondence with one of its lines of symmetry, to allow by means of its elastic deformation to temporarily convert it into a laminar flat body that in a cutting stage is provided with large notches (3) on its ends, preferably having the isosceles trapezoid shape particularly visible in Figure 2, so that at the end of this cutting stage for obtaining the notches (3), the elastic recovery of the body (1)

makes it regain its original tubular or three-dimensional configuration, as in either figure 1 or 2.

The axial length of the tubular body (1) shall be that suitable for the thickness of the mattress, as can be inferred from Figure 2, and the notches (3) of its ends are meant to facilitate, together with the longitudinal slit (2), the coupling of the corner piece to the springs (4) that participate in the mattress, each corner piece (1) naturally being placed at each vertical edge of the mattress, helping to elastically stiffen said edges as they cover their surface and provide an aesthetic finish, as well as helping prevent their deformation.

Likewise, in another preferred embodiment of the invention a tubular body (1') is provided with a configuration tending towards a cylinder as in the previous case, also preferably made of polyethylene and obtained by extrusion, the tubular body (1') also being open by a longitudinal slit (2) placed in correspondence with one of its lines of symmetry.

However, in this embodiment the tubular body (1') is provided with notches (3') on its ends, preferably having an isosceles trapezoid configuration with an oblique cut, truncation or bevel (5) at the vertices corresponding to the greater base of the trapezoid located farthest away from the longitudinal slit, as shown in figures 3 to 6, which allow improving the flexion of the tubular body and thus of the corners of the mattress, so that their stiffness is close to or similar to that of the rest of the mattress. In addition, under and near said bevels (5) the body (1') has cut-outs or orifices (6) that aid in the deformation or flexion of the body (1') in a vertical sense, due to the presence of a narrow strip

between the upper edge of the body (1') and the aforementioned cut-outs (6) that flexes easily.